

EXHIBIT B

UNITED STATES DISTRICT COURT
DISTRICT OF SOUTH CAROLINA
CHARLESTON DIVISION

COMMISSIONERS OF PUBLIC WORKS OF)	Civil Action No. 2:21-cv-00042-RMG
THE CITY OF CHARLESTON (d.b.a.)	
Charleston Water System), Individually and on)	<u>CLASS ACTION</u>
Behalf of All Others Similarly Situated,)	
Plaintiff,)	AFFIDAVIT OF <u>Chadwick Abrams</u> IN
vs.)	SUPPORT OF PLAINTIFF'S OPPOSITION
COSTCO WHOLESALE CORPORATION,)	TO DEFENDANTS' JOINT MOTION TO
CVS HEALTH CORPORATION,)	DISMISS
KIMBERLY-CLARK CORPORATION, THE)	
PROCTER & GAMBLE COMPANY,)	
TARGET CORPORATION, WALGREENS)	
BOOTS ALLIANCE, INC. and WAL-MART,)	
INC.,)	
Defendants.)	
_____)	

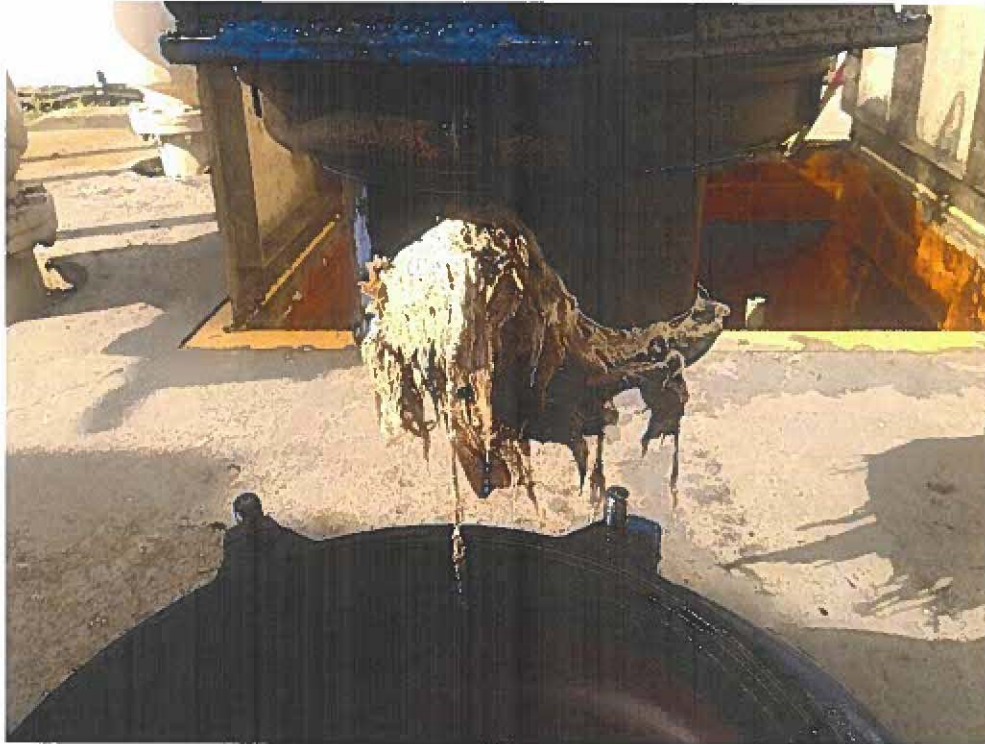
Chadwick Abrams being duly sworn, states the following:

1. I submit this affidavit in support of Plaintiff's Opposition to Defendants' Joint Motion to Dismiss.
2. I am the Deputy Director of Capital Projects for the North Charleston Sewer District (NCSD).
3. In my role with NCSD I oversee the daily operation and maintenance of the wastewater collection system.

4. I am a licensed Professional Engineer in the state of South Carolina with fourteen (14) years of wastewater experience with five (5) years of direct oversight of operation and maintenance of the collection system.
5. My responsibilities include implementing proactive and responsive steps toward minimizing and responding to wastewater collection blockages and overflows.
6. I oversee thirty-eight (38) environmental professionals who work daily to maintain and operate NCSD's wastewater collection system.
7. Through our normal maintenance program, we routinely clean our wastewater collection system and remove large quantities of wipes (also known in the wastewater industry as "rags") from our sewers, pump stations, and other assets.
8. Based upon years of experience dealing with wipes in our wastewater collection system, I believe that the wipes we remove from our system are a combination of both flushable and non-flushable wipes.
9. We have had issues in general with wipes-related blockages and interference with our wastewater system operations.
10. We are continually concerned about wipes-related blockages in our sewer lines, pump stations, treatment plant and other facilities because wipes-related blockages are an ongoing problem, can occur at any time, and may lead to system reliability failures and sewer overflows to public and private property as well as area waterways.
11. We are so concerned about wipes-related blockages and resulting equipment failures that NCSD has spent approximately \$1,000,000 to upgrade the SCADA system to keep constant communication with all pump stations within the collection system. The new system gives supervisors the ability to quickly identify pump performance issues very

often caused by wipes clogging pumps or disabling floats and related level control systems.

12. NCSD has preventative maintenance programs in place to clean bars screens of wipes weekly and to pump debris (wipes and other material) on a varied schedule.
13. Increased cleaning schedules within the collection system have been required where the wipes collect, including bar screens, grinders, pump station wet wells, floats, pumps, and mainlines.
14. Wipes-related blockages can occur at any time and must often be managed on an emergency basis to prevent Sanitary Sewer Overflows. Notification of blockages can occur at any time through our SCADA system, normal preventive checks, and customer calls to our emergency 24-hour dispatch.
15. Wipes – both flushable and non-flushable – pose one of the most significant operational risks within our collection system and have required our expenditure of significant manpower and financial resources.







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16. NCSD has increased its collection system inspection and maintenance to reduce operational risks associated with both flushable and non-flushable wipes.
17. Despite all our targeted wipes-related mitigation measures, we can have wipes-related blockages at any time. It is a constant worry of mine and the NCSD team that I lead. These concerns have been exacerbated during the ongoing pandemic.

Chadwick Abrams, PE

State of South Carolina

Charleston County

The forgoing instrument was acknowledged before me this 13th day of May,

2021 by Elizabeth S. Burns.

Name: Elizabeth S. Burns

Notary Public for South Carolina

My Commission Expires 12/20/2027

